

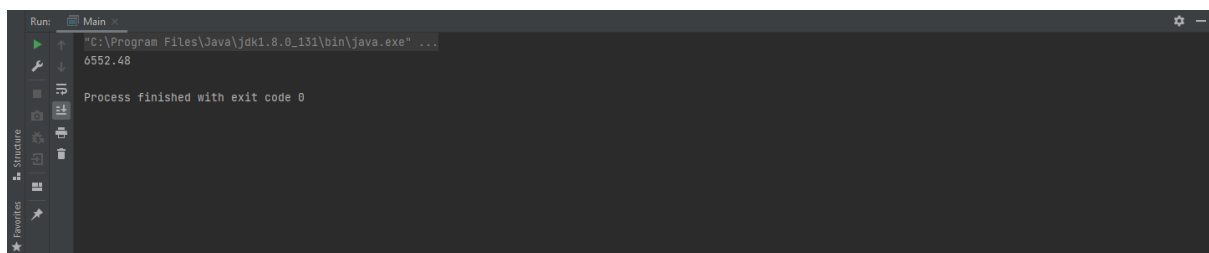
Java concepts

Create a class Box that uses a parameterized method to initialize the dimensions of a box.(dimensions are width, height, depth of double type). The class should have a method that can return volume. Obtain an object and print the corresponding volume in main() function.

PROGRAM :

```
package com.company;
import java.util.*;
class Box{
    double h,w,d;
    Box(double width,double height,double depth){
        h=height;
        w=width;
        d=depth;
    }
    double volume(){
        double v;
        v=h*w*d;
        return v;
    }
    public static void main(String[] args){
        Box bc =new Box(8.5,80.3,9.6);
        System.out.println(bc.volume());
    }
}
```

OUTPUT :

A screenshot of a Java IDE's 'Run' console. The console shows the execution of the program, displaying the output '6552.48' and the message 'Process finished with exit code 0'. The IDE interface includes a sidebar with icons for Run, Structure, and Favorites, and a main area showing the command prompt and output.

Problem 2

Create a new class called "Calculator" which contains the following:

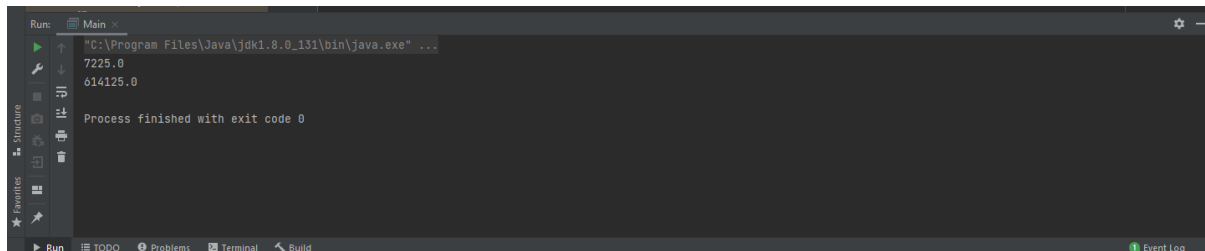
1. A static method called `powerInt(int num1,int num2)` that accepts two integers and returns `num1` to the power of `num2` (`num1` power `num2`).
2. A static method called `powerDouble(double num1,int num2)` that accepts one double and one integer and returns `num1` to the power of `num2` (`num1` power `num2`).
3. Call your method from another class without instantiating the class (i.e. call it like `Calculator.powerInt(12,10)` since your methods are defined to be static)

Hint: Use `Math.pow(double,double)` to calculate the power.

PROGRAM :

```
package com.company;
import java.util.*;
class CALCI {
    public static void main(String[] args) {
        System.out.println(Calculator.powerDouble(85.0, 2));
        System.out.println(Calculator.powerInt(85,3));
    }
}
class Calculator {
    static double powerInt(int num1,int num2) {
        return Math.pow(num1,num2);
    }
    static double powerDouble(double num1,int num2) {
        return Math.pow(num1,num2);
    }
}
```

OUTPUT :

A screenshot of an IDE's Run console window. The window title is "Run: Main". It shows the command "C:\Program Files\Java\jdk1.8.0_131\bin\java.exe ..." being executed. The output consists of two lines: "7225.0" and "614125.0". Below the output, it says "Process finished with exit code 0". The IDE interface includes a sidebar with icons for Run, Structure, Favorites, and a bottom status bar with Run, TODO, Problems, Terminal, Build, and Event Log.